AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116
Serial Number: 09/835,034
Filing Date: April 13, 2001
Title: TIMING MULTIPLE EVENTS WITH A SINGLE TIMER

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IN THE CLAIMS

Please amend the claims as follows:

1-34. (Cancelled).

35. (Currently Amended) A method for timing multiple events <u>using a single timer</u> comprising:

providing a clock capable of indicating a current time;

receiving a plurality of time durations each having a respective duration;

determining an expiration time of each time duration based on a respective received time and said respective duration;

determining which expiration time of said time durations is first to occur relative to said current time;

establishing a start time based on the current time when said first to occur expiration time is determined;

determining a time period based on a difference between said start time and said first to occur expiration time minus an amount of time to send an action signal;

providing ~~a~~ <u>said single</u> timer;

timing said time period with said <u>single</u> timer;

transmitting said action signal corresponding to said time duration having said first to occur expiration time when said time period has expired<u>;</u>

<u>receiving an additional time duration having an additional expiration time while said single timer is timing said time period;</u>

<u>determining if said additional expiration time will occur sooner than said first to occur expiration time;</u>

<u>establishing a new start time based on a current time when said additional expiration time is determined to occur sooner than said first to occur expiration time;</u>

<u>determining a new time period based on a time difference between said new start time and said additional expiration time;</u>

<u>timing said new time period with said single timer; and</u>

transmitting an action signal corresponding to said additional time duration.

36. (Cancelled)

37. (Cancelled)

38. (Previously Presented) The method according to claim 35, further comprising:

after transmitting said action signal, determining an expiration time that is next to occur relative to said current time;

establishing a second start time based on a current time when said next to occur expiration time is determined;

determining a second time period equal to the time difference between said second start time and said next to occur expiration time;

providing a timer;

timing said second time period; and

transmitting a second action signal corresponding to said time duration having said next to occur expiration time.

39. (Previously Presented) The method according to claim 35, further comprising:

checking a first indicator upon transmitting said action signal, said first indicator corresponding to whether said action signal should be sent again; and

determining a second expiration time for resending said action signal if said indicator indicates that said action signal should be sent again.

40. (Currently Amended) A set of instructions residing in a storage medium, said set of instructions capable of being executed by a processor to implement a method for timing multiple events using a single timer, the method comprising:

providing a clock capable of indicating a current time;

receiving a plurality of time durations each having a respective duration;

determining an expiration time of each time duration based on a respective received time and said respective duration;

determining which expiration time of said time durations is first to occur relative to said current time;

establishing a start time based on the current time when said first to occur expiration time is determined;

determining a time period based on a difference between said start time and said first to occur expiration time minus an amount of time to send an action signal;

providing a said single timer;

timing said time period with said single timer;

transmitting said action signal corresponding to said time duration having said first to occur expiration time when said time period has expired;

receiving an additional time duration having an additional expiration time while said single timer is timing said time period;

determining if said additional expiration time will occur sooner than said first to occur expiration time;

establishing a new start time based on a current time when said additional expiration time is determined to occur sooner than said first to occur expiration time;

determining a new time period based on a time difference between said new start time and said additional expiration time;

timing said new time period with said single timer; and

transmitting an action signal corresponding to said additional time duration.

41. (Cancelled)

42. (Cancelled)

43. (Previously Presented) The set of instructions according to claim 40, wherein said method to be implemented further comprises:

after transmitting said action signal, determining an expiration time that is next to occur relative to said current time;

establishing a second start time based on a current time when said next to occur expiration time is determined;

determining a second time period equal to the time difference between said second start time and said next to occur expiration time;

providing a timer;

timing said second time period; and

transmitting a second action signal corresponding to said time duration having said next to occur expiration time.

44. (Previously Presented) The set of instructions according to claim 40, wherein said method to be implemented further comprises:

checking a first indicator upon transmitting said action signal, said first indicator corresponding to whether said action signal should be sent again; and

determining a second expiration time for resending said action signal if said indicator indicates that said action signal should be sent again.

45. (Currently Amended) A system comprising:

a processor, a memory, a clock capable of indicating a current time, a single timer, and a set of instructions executable by said processor for:

receiving a plurality of time durations, each having a respective duration in said memory;

determining an expiration time of each time duration based on a respective received time and said respective duration;

determining which expiration time of said time durations is first to occur relative to said current time;

establishing a start time based on the current time when said first to occur expiration time is determined;

determining a time period based on a difference between said start time and said first to occur expiration time minus an amount of time to send an action signal;

causing said <u>single</u> timer to time said time period;

transmitting said action signal corresponding to said time duration having said first to occur expiration time when said time period has expired<u>;</u>

<u>receiving an additional time duration in said memory, said additional time duration having an additional expiration time while said single timer is timing said time period; and</u>

<u>determining if said additional expiration time will occur sooner than said first to occur expiration time;</u>

<u>establishing a new start time based on a current time when said additional expiration time is determined to occur sooner than said first to occur expiration time;</u>

<u>determining a new time period based on a time difference between said new start time and said additional expiration time;</u>

<u>causing said single timer to time said new time period with said single timer; and</u>

<u>transmitting an action signal corresponding to said additional time duration.</u>

46. (Currently Amended)

47. (Currently Amended)

48. (Previously Presented) The system according to claim 45, wherein instructions are further executable by said processor for:

determining an expiration time that is next to occur relative to said current time, after said action signal has been transmitted;

establishing a second start time based on a current time when said next to occur expiration time is determined;

determining a second time period equal to the time difference between said second start time and said next to occur expiration time;

causing said timer to time said second time period; and

transmitting a second action signal corresponding to said time duration having said next to occur expiration time.

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49. (Previously Presented) The system according to claim 45, wherein said instructions are further executable by said process or for:

checking a first indicator upon transmitting said action signal, said first indicator corresponding to whether said action signal should be sent again; and

determining a second expiration time for resending said action signal if said indicator indicates that said action signal should be sent again.

50. (Previously Presented) The system according to claim 45, wherein said timer comprises a software module.